#17
81
9/23/02

1600

RAW SEQUENCE LISTING   DATE: 09/19/2002
PATENT APPLICATION: **US/09/361,655**   TIME: 13:09:08

Input Set : **A:\EP.txt**
Output Set: **N:\CRF4\09192002\I361655.raw**

P.6

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 2 <110> APPLICANT: THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE
 3        LEE, Se-Jin
 4        ESQUELA, Aurora F.
 6 <120> TITLE OF INVENTION: METHODS OF DETECTING LIVER CELLS EXPRESSING GROWTH
DIFFERENTIATION
 7        FACTOR-12
 9 <130> FILE REFERENCE: JHU1220-4
11 <140> CURRENT APPLICATION NUMBER: US 09/361,655
12 <141> CURRENT FILING DATE: 1999-07-27
14 <150> PRIOR APPLICATION NUMBER: US 08/765,662
15 <151> PRIOR FILING DATE: 1997-04-28
17 <150> PRIOR APPLICATION NUMBER: PCT/ US95/08745
18 <151> PRIOR FILING DATE: 1995-07-12
20 <150> PRIOR APPLICATION NUMBER: US 08/274,215
21 <151> PRIOR FILING DATE: 1994-07-13
23 <160> NUMBER OF SEQ ID NOS: 14
25 <170> SOFTWARE: PatentIn version 3.1
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28 <211> LENGTH: 34
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33 <223> OTHER INFORMATION: PCR primer
35 <220> FEATURE:
36 <221> NAME/KEY: misc_feature
37 <222> LOCATION: (12)..(12)
38 <223> OTHER INFORMATION: n = inosine
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41 <221> NAME/KEY: misc_feature
42 <222> LOCATION: (18)..(18)
43 <223> OTHER INFORMATION: n is any nucleotide
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46 <221> NAME/KEY: misc_feature
47 <222> LOCATION: (26)..(26)
48 <223> OTHER INFORMATION: n = inosine
50 <220> FEATURE:
51 <221> NAME/KEY: misc_feature
52 <222> LOCATION: (29)..(29)
53 <223> OTHER INFORMATION: n = inosine
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59 <210> SEQ ID NO: 2
60 <211> LENGTH: 33
61 <212> TYPE: DNA
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Input Set : **A:\EP.txt**
Output Set: **N:\CRF4\09192002\I361655.raw**

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 64 <220> FEATURE:
 65 <223> OTHER INFORMATION: PCR primer
 67 <220> FEATURE:
 68 <221> NAME/KEY: misc_feature
 69 <222> LOCATION: (13)..(13)
 70 <223> OTHER INFORMATION: n = inosine
 72 <220> FEATURE:
 73 <221> NAME/KEY: misc_feature
 74 <222> LOCATION: (19)..(19)
 75 <223> OTHER INFORMATION: n = inosine
 77 <220> FEATURE:
 78 <221> NAME/KEY: misc_feature
 79 <222> LOCATION: (22)..(22)
 80 <223> OTHER INFORMATION: n is any nucleotide
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 83 <221> NAME/KEY: misc_feature
 84 <222> LOCATION: (25)..(25)
 85 <223> OTHER INFORMATION: n = inosine
 87 <220> FEATURE:
 88 <221> NAME/KEY: misc_feature
 89 <222> LOCATION: (28)..(28)
 90 <223> OTHER INFORMATION: n = inosine
 92 <400> SEQUENCE: 2
 93 ccggaattcr canscrcanc ynwcnacnry cat                    33
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 99 <213> ORGANISM: Artificial sequence
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107 <223> OTHER INFORMATION: n = inosine
109 <220> FEATURE:
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111 <222> LOCATION: (19)..(19)
112 <223> OTHER INFORMATION: n = inosine
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115 <221> NAME/KEY: misc_feature
116 <222> LOCATION: (22)..(22)
117 <223> OTHER INFORMATION: n is any nucleotide
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121 <222> LOCATION: (25)..(25)
122 <223> OTHER INFORMATION: n = inosine
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RAW SEQUENCE LISTING   DATE: 09/19/2002
PATENT APPLICATION: US/09/361,655   TIME: 13:09:08

Input Set : A:\EP.txt
Output Set: N:\CRF4\09192002\I361655.raw

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127 <223> OTHER INFORMATION: n = inosine
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134 <211> LENGTH: 33
135 <212> TYPE: DNA
136 <213> ORGANISM: Artificial sequence
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141 <220> FEATURE:
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143 <222> LOCATION: (13)..(13)
144 <223> OTHER INFORMATION: n = inosine
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148 <222> LOCATION: (19)..(19)
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153 <222> LOCATION: (22)..(22)
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157 <221> NAME/KEY: misc_feature
158 <222> LOCATION: (25)..(25)
159 <223> OTHER INFORMATION: n = inosine
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163 <222> LOCATION: (28)..(28)
164 <223> OTHER INFORMATION: n = inosine
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167 ccggaattcr canscrcant snwcnacnry cat                      33
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173 <213> ORGANISM: Artificial sequence
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178 <220> FEATURE:
179 <221> NAME/KEY: misc_feature
180 <222> LOCATION: (13)..(13)
181 <223> OTHER INFORMATION: n = inosine
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185 <222> LOCATION: (19)..(19)
186 <223> OTHER INFORMATION: n = inosine
188 <220> FEATURE:
189 <221> NAME/KEY: misc_feature
190 <222> LOCATION: (22)..(22)
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RAW SEQUENCE LISTING   DATE: 09/19/2002
PATENT APPLICATION: US/09/361,655   TIME: 13:09:08

Input Set : **A:\EP.txt**
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195 <222> LOCATION: (25)..(25)
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209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial sequence
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215 <220> FEATURE:
216 <221> NAME/KEY: misc_feature
217 <222> LOCATION: (13)..(13)
218 <223> OTHER INFORMATION: n = inosine
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226 <221> NAME/KEY: misc_feature
227 <222> LOCATION: (22)..(22)
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231 <221> NAME/KEY: misc_feature
232 <222> LOCATION: (25)..(25)
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245 <211> LENGTH: 33
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial sequence
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252 <220> FEATURE:
253 <221> NAME/KEY: misc_feature
254 <222> LOCATION: (13)..(13)
255 <223> OTHER INFORMATION: n = inosine
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RAW SEQUENCE LISTING   DATE: 09/19/2002
PATENT APPLICATION: US/09/361,655   TIME: 13:09:08

Input Set : A:\EP.txt
Output Set: N:\CRF4\09192002\I361655.raw

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257 <220> FEATURE:
258 <221> NAME/KEY: misc_feature
259 <222> LOCATION: (19)..(19)
260 <223> OTHER INFORMATION: n = inosine
262 <220> FEATURE:
263 <221> NAME/KEY: misc_feature
264 <222> LOCATION: (22)..(22)
265 <223> OTHER INFORMATION: n is any nucleotide
267 <220> FEATURE:
268 <221> NAME/KEY: misc_feature
269 <222> LOCATION: (25)..(25)
270 <223> OTHER INFORMATION: n = inosine
272 <220> FEATURE:
273 <221> NAME/KEY: misc_feature
274 <222> LOCATION: (28)..(28)
275 <223> OTHER INFORMATION: n = inosine
277 <400> SEQUENCE: 7
278 ccggaattcr canscrcang mnwcnacnry cat                    33
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282 <211> LENGTH: 33
283 <212> TYPE: DNA
284 <213> ORGANISM: Artificial sequence
286 <220> FEATURE:
287 <223> OTHER INFORMATION: PCR primer
289 <220> FEATURE:
290 <221> NAME/KEY: misc_feature
291 <222> LOCATION: (13)..(13)
292 <223> OTHER INFORMATION: n = inosine
294 <220> FEATURE:
295 <221> NAME/KEY: misc_feature
296 <222> LOCATION: (19)..(19)
297 <223> OTHER INFORMATION: n = inosine
299 <220> FEATURE:
300 <221> NAME/KEY: misc_feature
301 <222> LOCATION: (22)..(22)
302 <223> OTHER INFORMATION: n is any nucleotide
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305 <221> NAME/KEY: misc_feature
306 <222> LOCATION: (25)..(25)
307 <223> OTHER INFORMATION: n = inosine
309 <220> FEATURE:
310 <221> NAME/KEY: misc_feature
311 <222> LOCATION: (28)..(28)
312 <223> OTHER INFORMATION: n = inosine
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315 ccggaattcr canscrcanm gnygnacnry cat                    33
318 <210> SEQ ID NO: 9
319 <211> LENGTH: 33
320 <212> TYPE: DNA
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/19/2002
PATENT APPLICATION: US/09/361,655   TIME: 13:09:09

Input Set : A:\EP.txt
Output Set: N:\CRF4\09192002\I361655.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 12,18,26,29
Seq#:2; N Pos. 13,19,22,25,28
Seq#:3; N Pos. 13,19,22,25,28
Seq#:4; N Pos. 13,19,22,25,28
Seq#:5; N Pos. 13,19,22,25,28
Seq#:6; N Pos. 13,19,22,25,28
Seq#:7; N Pos. 13,19,22,25,28
Seq#:8; N Pos. 13,19,22,25,28
Seq#:9; N Pos. 13,19,22,25,28
Seq#:10; N Pos. 13,19,22,25,28

VERIFICATION SUMMARY   DATE: 09/19/2002
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Input Set : **A:\EP.txt**
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```
L:56 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:204 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:241 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:315 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
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